

REPORT DOCUMENTATION PAGE					Form Approved OMB No. 0704-0188	
<p>The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Service Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p> <p>PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ORGANIZATION.</p>						
1. REPORT DATE (DD-MM-YYYY) 04/10/2013		2. REPORT TYPE Final Environmental Impact Statement			3. DATES COVERED (From - To) 30/12/2009-2/12/2013	
4. TITLE AND SUBTITLE F-35A OPS 1 Record of Decision F-35A OPS 3 Record of Decision F-35A Operational Basing Environmental Impact Statement Vol I F-35A Operational Basing Environmental Impact Statement Vol II Appendices A-E				5a. CONTRACT NUMBER GS-10F-0122J		
				5b. GRANT NUMBER N/A		
				5c. PROGRAM ELEMENT NUMBER N/A		
6. AUTHOR(S) Cardno TEC, Inc Wyle Laboratories, Inc. Scientific Resources Associated				5d. PROJECT NUMBER N/A		
				5e. TASK NUMBER N/A		
				5f. WORK UNIT NUMBER N/A		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S Army Corps of Engineers Geotechnical and Environmental Engineering Branch (CESPK-ED-GI) 1325 J Street Sacramento, CA 95814					8. PERFORMING ORGANIZATION REPORT NUMBER N/A	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Headquarters Air Combat Command Installations and Mission Support Directorate, Engineering Division (A7N) 129 Andrews Street Langley Air Force Base, VA 23665					10. SPONSOR/MONITOR'S ACRONYM(S) ACC/A7N	
					11. SPONSOR/MONITOR'S REPORT NUMBER(S) N/A	
12. DISTRIBUTION/AVAILABILITY STATEMENT DISTRIBUTION A. Approved for public release: distribution unlimited.						
13. SUPPLEMENTARY NOTES Report totals 2440 pages						
14. ABSTRACT Development and fielding of the F-35A represents one of the priority defense programs for the U.S. The F-35 program was initiated in the early 1990s to provide the premier strike fighter aircraft to the Air Force, Marine Corps, and Navy, as well as international partners for the next several decades. Currently, the Air Force is scheduled to acquire and field over 1,700 F-35As over the next several decades; this basing action is only a part of the Air Force's program to assure availability of combat-ready pilots and maintenance personnel in the most advanced fighter aircraft in the world. This Environmental Impact Statement focuses on the analysis of alternative locations for and the Records of Decision for the Air Force's initial operational wing locations.						
15. SUBJECT TERMS F-35A, Environmental Impact Statement, Environmental Analysis, Record of Decision, Operational Location, US Air Force						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT	b. ABSTRACT	c. THIS PAGE			Larry H. Dryden	
Unclassified	SAR	SAR	SAR		19b. TELEPHONE NUMBER (Include area code) (757) 764-2192	

Reset

INSTRUCTIONS FOR COMPLETING SF 298

1. REPORT DATE. Full publication date, including day, month, if available. Must cite at least the year and be Year 2000 compliant, e.g. 30-06-1998; xx-06-1998; xx-xx-1998.

2. REPORT TYPE. State the type of report, such as final, technical, interim, memorandum, master's thesis, progress, quarterly, research, special, group study, etc.

3. DATES COVERED. Indicate the time during which the work was performed and the report was written, e.g., Jun 1997 - Jun 1998; 1-10 Jun 1996; May - Nov 1998; Nov 1998.

4. TITLE. Enter title and subtitle with volume number and part number, if applicable. On classified documents, enter the title classification in parentheses.

5a. CONTRACT NUMBER. Enter all contract numbers as they appear in the report, e.g. F33615-86-C-5169.

5b. GRANT NUMBER. Enter all grant numbers as they appear in the report, e.g. AFOSR-82-1234.

5c. PROGRAM ELEMENT NUMBER. Enter all program element numbers as they appear in the report, e.g. 61101A.

5d. PROJECT NUMBER. Enter all project numbers as they appear in the report, e.g. 1F665702D1257; ILIR.

5e. TASK NUMBER. Enter all task numbers as they appear in the report, e.g. 05; RF0330201; T4112.

5f. WORK UNIT NUMBER. Enter all work unit numbers as they appear in the report, e.g. 001; AFAPL30480105.

6. AUTHOR(S). Enter name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. The form of entry is the last name, first name, middle initial, and additional qualifiers separated by commas, e.g. Smith, Richard, J, Jr.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES). Self-explanatory.

8. PERFORMING ORGANIZATION REPORT NUMBER. Enter all unique alphanumeric report numbers assigned by the performing organization, e.g. BRL-1234; AFWL-TR-85-4017-Vol-21-PT-2.

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES). Enter the name and address of the organization(s) financially responsible for and monitoring the work.

10. SPONSOR/MONITOR'S ACRONYM(S). Enter, if available, e.g. BRL, ARDEC, NADC.

11. SPONSOR/MONITOR'S REPORT NUMBER(S). Enter report number as assigned by the sponsoring/monitoring agency, if available, e.g. BRL-TR-829; -215.

12. DISTRIBUTION/AVAILABILITY STATEMENT. Use agency-mandated availability statements to indicate the public availability or distribution limitations of the report. If additional limitations/ restrictions or special markings are indicated, follow agency authorization procedures, e.g. RD/FRD, PROPIN, ITAR, etc. Include copyright information.

13. SUPPLEMENTARY NOTES. Enter information not included elsewhere such as: prepared in cooperation with; translation of; report supersedes; old edition number, etc.

14. ABSTRACT. A brief (approximately 200 words) factual summary of the most significant information.

15. SUBJECT TERMS. Key words or phrases identifying major concepts in the report.

16. SECURITY CLASSIFICATION. Enter security classification in accordance with security classification regulations, e.g. U, C, S, etc. If this form contains classified information, stamp classification level on the top and bottom of this page.

17. LIMITATION OF ABSTRACT. This block must be completed to assign a distribution limitation to the abstract. Enter UU (Unclassified Unlimited) or SAR (Same as Report). An entry in this block is necessary if the abstract is to be limited.

RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD F-35A OPERATIONAL BASE

Introduction

The United States Air Force (Air Force) is issuing this Record of Decision (ROD) for the F-35A Operational Basing Environmental Impact Statement (EIS) (Federal Register, Vol. 78, No. 193, EIS No. 20130295, pg. 61845, October 4, 2013). In making this decision, the information, analyses, and public comments contained in the F-35A Operational Basing Final Environmental Impact Statement (FEIS) were considered, along with other relevant matters. The Air Force has decided to implement two Records of Decision for the proposed beddown of F-35A operational aircraft; one for Air Combat Command (ACC) and the other for the Air National Guard (ANG) installations. This ROD covers the ANG basing decision; a ROD covering the ACC basing decision will be issued separately.

The two RODS reflect separate and distinct decisions that the Air Force is making. The Air Force is the lead agency, with the Department of the Navy and Federal Aviation Administration (FAA) acting as cooperating agencies.

This ROD is prepared in accordance with the Council on Environmental Quality regulations implementing the National Environmental Policy Act at Title 40 Code of the Federal Regulations, § 1505.2, *Record of decision in cases requiring environmental impact statements*. Specifically, this ROD:

- States the Air Force's Decision (page 1);
- Identifies alternatives considered by the Air Force in reaching the decision (page 2) and specifies the ANG environmentally preferred alternative (page 2);
- Identifies and discusses relevant factors that were considered in making the decision among the ANG alternatives and states how those factors entered into the decision (pages 2 and 3); and
- States whether all practicable means to avoid or minimize environmental harm from the selected alternatives were adopted, and if not, why they were not adopted, and summarizes the applicable monitoring and enforcement program adopted for the applicable mitigations (pages 4 through 8).

Decision

Of the three ANG alternative basing locations considered in the FEIS (Burlington Air Guard Station (AGS), VT, Jacksonville AGS, FL and McEntire Joint National Guard Base (JNGB), SC), the Air Force has decided to base eighteen (18) F-35A aircraft with associated construction at Burlington AGS in Vermont to accommodate aircraft anticipated to start arriving in 2020. This beddown of 18 F-35A primary aircraft assigned (PAA). The 18 F-16 PAA fighter aircraft currently assigned to Burlington AGS are scheduled to retire as F-35As are brought into the Air Force inventory.

Background

Development and fielding of the F-35A represents one of the priority defense programs for the U.S. The F-35 program was initiated in the early 1990s to provide the premier strike fighter

RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD F-35A OPERATIONAL BASE

aircraft to the Air Force, Marine Corps, and Navy, as well as international partners, for the next several decades.

Currently, the Air Force is scheduled to acquire and field over 1,700 F-35As over the next several decades; this basing action is only a part of the Air Force's program to assure availability of combat-ready pilots and maintenance personnel in the most advanced fighter aircraft in the world. This ROD focuses on the location for the Air Force's first operational ANG squadron; the Air Force will make basing decisions in the future for additional operational and training squadrons in the U.S. and at bases overseas.

The Air Force designated the F-35A to replace the Air Force's F-16 and A-10 fighter attack aircraft. F-35A aircraft will fulfill a wide range of roles and missions.

Alternative Identification

As more fully discussed in the FEIS (pages 2-24 through 2-26, Section 2.2.1), the Air Force assembled a group of subject matter experts to embark on an internal review process to identify potential locations for basing the F-35A. The team used specified planning conventions and criteria to identify potential candidate bases, as generally follows:

- Applied screening criteria to 205 locations that could possibly support the F-35A operational mission
- Reduced the 205 basing locations to six locations, which were carried forward for analysis as reasonable alternatives in the FEIS (pages 26-27, Section 2.1).

As pertains to the decision in this ROD, the basing alternatives considered were:

- Burlington AGS, Burlington International Airport, Vermont
- Jacksonville AGS, Jacksonville International Airport, Florida
- McEntire JNGB, South Carolina

The No-Action Alternative was also evaluated for each of the three basing alternative locations.

Environmentally Preferable Alternative

Of the three alternatives analyzed, the environmentally preferable alternative is McEntire JNGB Scenario 1 (FEIS, pg. 2-31, Table 2-12). Under McEntire JNGB Scenario 1 (18 total F-35A aircraft), there would be the most significant decrease in the number of acres, population, households, and receptors exposed to noise levels 65 decibels day-night average sound level and greater when compared to the baseline conditions and the No-Action Alternative.

Basis of Decision

Burlington AGS was selected because it presents the best mix of infrastructure, airspace and overall cost to the Air Force. Burlington AGS has adequate infrastructure to support the F-35A mission which resulted in having the lowest implementation costs of all the candidate locations. Burlington's airspace and ranges can support projected F-35A training requirements and offers

RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD F-35A OPERATIONAL BASE

exceptional joint and coalition training opportunities with F-15Cs from Barnes AGS, the 10th Mountain Division at Fort Drum, and CF-18s stationed at Canadian Forces Base Bagotville in Quebec. The 158th Fighter Wing at Burlington AGS has a mature and highly successful active association with its current F-16s that will transition to the F-35As when they arrive. Burlington AGS currently hosts the oldest version of the F-16 aircraft which are scheduled to retire as F-35As are brought into the Air Force inventory. This decision avoids the cost of having to relocate newer, more advanced fighter units that are not being replaced with these F-35As. The F-35As at Burlington AGS will negate the need to relocate the front line F-16s (Block 52) at McEntire or the F-15Cs currently stationed at Jacksonville. Likewise, no additional manpower positions will need to be sourced from across the Air Force in order to stand-up this mission at Burlington AGS. Finally, this decision will not disrupt the Air Force's ability to present essential combat capability to the Combatant commanders during the stand-up of this F-35A squadron at Burlington AGS.

Public Involvement

Public involvement was integral to the Air Force's development of the FEIS. Many comments were received and considered, including those received during scoping, at public hearings, and during the public comment period on the draft EIS (see FEIS, pgs. 1-9 and 1-10, Sections 1.5.2 and 1.5.3). Comments received on the FEIS, although not included in the FEIS, were considered in making this decision.

Information reflecting public involvement associated with the three basing alternative locations is found in each base-specific Chapter 2 at Section XX2.5 (e.g., BR2.5 for Burlington AGS). Furthermore, Volume II, Appendix A and E provide public involvement documentation as well as comments received and Air Force responses to comments. Public notices and meetings included:

- *Notice of Intent*: Published December 30, 2009 in the Federal Register (FR), Volume 74, Number 249, page 69080.
- *Scoping Period*: Initiated December 30, 2009 and ended March 1, 2010. During this time 19 scoping meetings were held in Florida, Georgia, Idaho, Maine, Nevada, New Hampshire, New York, South Carolina, Utah, and Vermont.
- *Draft EIS Notice of Availability*: Published April 13, 2012 in the FR, Volume 77, Number 72, page 22315.
- *Public Comment and Review Period*: A 45-day comment period was initiated with the Notice of Availability publication in the FR and was to end on June 4, 2012; however, public comment was extended to June 20, 2012 to accommodate an additional hearing in Maine.
- *Public Hearings*: During the public comment and review period, 17 hearings were held spread between Florida, Georgia, Idaho, Maine, Nevada, New Hampshire, New York, South Carolina, Utah, and Vermont.
- *Updated Draft EIS Notice of Availability*: Published in the FR on May 31, 2013, Volume 78, Number 105, page 32645.
- *Public Comment and Review*: A 45-day comment period was initiated May 31, 2013 and ended on July 16, 2013.

RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD F-35A OPERATIONAL BASE

- *Final EIS Notice of Availability*: Published in the FR on October 4, 2013, Volume 78, Number 193, page 61844. This initiated the mandatory 30-day waiting period prior to ROD signature.

Management Actions and Mitigations

Avoiding or reducing potential environmental impacts was a consideration guiding the analysis of the F-35A basing alternatives. Some management actions are built or designed into the proposed action and alternatives. Mitigation measures are implemented as compensatory measures.

Specific management actions (i.e., those required by regulation or Air Force guidance and instructions) to facilitate the implementation of the decision were identified in the FEIS and will be carried forward and implemented (FEIS, Section 2.6). These measures include continuation of ongoing operational restrictions and avoidance measures and are summarized below by applicable environmental resource areas. A mitigation plan will be developed and put in place as reflected in this ROD and in the FEIS.

Given the relative immaturity of the F-35 program, identification of new data and information relative to the F-35A may arise and it is possible that the impacts identified in the FEIS (Table 2-12) and the effectiveness of prescribed management and mitigation measures may be different from those expected. Consequently, new information may become available, or the effectiveness of mitigation measures may be different than expected. An understanding of various aspects that are part of a complex interrelated F-35A operational environment may not be achieved without a more long-term process built around a continuous cycle of experimentation, evaluation, learning, and improvement over time.

To accommodate for this, within 90 days of the signature of this ROD, the Air National Guard will develop a mitigation plan that identifies principal and subordinate organizations having responsibility for oversight and execution of specific mitigation and management actions. The plan will include but not be limited to the following:

- Identification of the specific actions
- Identification of the responsible organization for each action
- Timing for execution of the actions
- Definition of the adaptive management approach to be used

An adaptive management program will be developed in accordance with the President's Council on Environmental Quality mitigation and monitoring guidance¹, and other legal and generally accepted practices. Furthermore, the Air Force's intends to provide flexibility in its adaptive management approach in order to comply with regulatory requirements.

¹ "Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact," January 14, 2011

RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD F-35A OPERATIONAL BASE

Management Actions Applicable to Burlington AGS

The Air Force and Air National Guard will:

- Direct Burlington AGS to continue to undertake the voluntary restrictions prescribed in the Aircraft Operations Measures (Nos. 5, 6 and 7) outlined in the Burlington International Airport Part 150 Record of Approval (June 2008)
- Work with the Vermont State Historic Preservation Office to ensure no adverse effects to listed historic properties and districts in the vicinity of Burlington International Airport.

Airspace Management and Use

- Coordinate closely with the FAA Air Route Traffic Control Centers and other FAA entities to minimize conflicts with civil and commercial aviation.
- Avoid airports and airfields underlying military airspace using standard procedures.

Noise

- Once the full complement of F-35A aircraft are operating at the base, prepare a noise study at Burlington AGS to validate the operational data in order to re-evaluate projected noise levels.
- Adhere to all existing FAA and local avoidance procedures, flight restrictions, scheduling adjustments, and other practices designed to reduce aircraft noise and overflights.
- Utilize advanced simulators for training to the extent practicable.
- Avoid, to the extent practicable:
 - Identified seasonably sensitive American Indian ceremonies or other seasonal activities.
 - Low-altitude (below 5,000 feet AGL) overflights of identified seasonally sensitive ranching and recreation activities.
 - Low-altitude overflights (below 5,000 feet AGL) on holidays.

Air Quality

- Employ fugitive dust control and soil retention practices including:
 - Water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the construction area.
 - Temporary wind fencing around sites being graded or cleared.
 - Suspension of all soil disturbance activities when winds exceed 25 miles per hour or when visible dust plumes emanate from the site.
 - Covering truck loads that haul dirt, sand, or gravel.
 - Designating personnel to monitor the dust control program and to order increased watering, as necessary, to prevent the transport of dust off-site.
- Employ, where feasible, construction equipment emission control measures by:
 - Maintaining equipment according to manufacturer specifications.
 - Restricting idling of equipment and trucks to a maximum of five minutes at any location.
 - Employing diesel oxidation catalysts and/or catalyzed diesel particulate traps.
 - Using electricity from power poles rather than temporary diesel- or gasoline-powered generators.

RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD F-35A OPERATIONAL BASE

- Providing temporary traffic control, such as a flag person, during all phases of construction to maintain smooth traffic flow.
- Keeping construction equipment and equipment staging areas away from sensitive receptor areas (such as day care centers).
- Re-routing construction trucks away from congested streets or sensitive receptor areas.
- Using construction equipment with engines that meet U.S. Environmental Protection Agency Tier 3 and 4 non-road standards.
- Using alternatively-fueled construction equipment, such as compressed natural gas, liquefied natural gas, or electric.
- Minimize traffic speeds on all unpaved roads.

Safety

- Working with the F-35 Joint Program Office and the ANG, develop F-35A and location-specific emergency fuel dumping procedures.
- Share information with local fire departments on F-35A crash response procedures.

Soils and Water

- Sequence construction activities to limit the soil exposure for long periods of time.
- Manage on-site stormwater to prevent discharges into nearby surface waters through site planning with low-impact design principles and engineered storm water retention ponds (or swales).
- Treat disturbed areas (after clearing, grading, earthmoving, or excavation is completed) by watering, re-vegetation, or by spreading non-toxic soil binders until they are paved or otherwise developed to prevent dust generation.
- Update Storm Water Pollution Prevention Plans as needed.
- Store chemicals, cements, solvents, paints, or other potential water pollutants in locations where they cannot cause runoff pollution.
- Install gravel pads at construction area access points to prevent tracking of soil onto paved roads.

Wildlife, Vegetation, and Wetlands

- Continue adherence to Bird/Wildlife Aircraft Strike Hazard program.
- Avoid spreading invasive nonnative species; preclude vehicles from driving in areas with known invasive nonnative species problems.
- Perform any repairs, maintenance, and use of construction equipment (i.e., cement mixers) in designated "staging areas" designed to contain any chemicals, solvents, or toxins from entering surface waters.
- Incorporate into the design and construction of paved surface areas a slope sufficient enough to direct potential runoff away from wetland areas.

Cultural Resources

- Continued avoidance of identified seasonally sensitive American Indian ceremonies or other seasonal activities.

RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD F-35A OPERATIONAL BASE

Land Use and Recreation

- Once the full complement of F-35A aircraft are operating at the base, prepare a noise study at Burlington AGS to validate operational data to re-evaluate projected noise levels.
- Avoid, to the extent practicable:
 - Identified seasonably sensitive American Indian ceremonies or other seasonal activities.
 - Low-altitude (below 5,000 feet AGL) overflights of identified seasonally sensitive ranching and recreation activities.
 - Low-altitude overflights (below 5,000 feet AGL) on holidays.

Community Facilities and Public Services

- Continue recycling and reuse programs to accommodate waste generated by construction and operational activities.
- Incorporate Leadership in Energy and Environmental Design and sustainable development concepts into design and construction to achieve optimum resource efficiency, sustainability, and energy conservation.

Hazardous Materials and Waste

- Follow established procedures for handling hazardous materials and disposing of hazardous wastes.
- Update Hazardous Waste Management Plan to account for any new and/or changed waste streams.

Determination of Whether All Practical Means to Avoid or Minimize Environmental Harm Have Been Adopted

The Air Force considered all practicable means to avoid or minimize environmental harm. The following noise mitigation measures at Burlington AGS were considered and evaluated but were either not operationally workable or did not substantially reduce noise impacts, and therefore are not considered to be practicable at this time.

Changing aircraft performance: Reducing aircraft wing flap settings, delaying flap extension, using unusually high speeds during aircraft landing approaches, or using reduced thrust (i.e., lowering power settings) are not operationally feasible or safe. These unsafe operating actions were not carried forward as potential mitigations.

Reduced use of afterburners: Afterburner use during departure is required for heavy aircraft loads that must be carried to accomplish certain training missions. The number of afterburner departures reflects training requirements and reducing them further would adversely affect training for combat readiness.

Modify approach or departure tracks: Flight tracks in the vicinity of Burlington AGS are limited by the terrain and adjacent communities. To ensure safety of flight near an airfield, a minimum distance must be maintained above ground elevation.

Implement additional altitude hold-downs during departure: Departure hold-downs were already integrated into F-35A operations at Burlington International Airport. No additional hold-downs can be adopted without affecting combat readiness training.

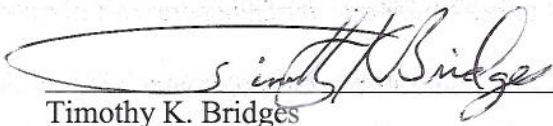
**RECORD OF DECISION FOR THE FIRST AIR NATIONAL GUARD
F-35A OPERATIONAL BASE**

Unavoidable Impacts

Certain F-35A beddown activities are projected to result in disturbance and/or noise within areas not previously or recently subjected to these effects. Some of these noise effects could be considered adverse or annoying to potentially affected individuals.

Decision

After considering the potential environmental impacts contained in the FEIS, as well as other factors relative to national policy and defense, including current military operational needs and cost, the Air Force has decided to base 18 F-35A aircraft at Burlington AGS in Vermont.



Timothy K. Bridges
Deputy Assistant Secretary of the Air Force
(Installations)

2 Dec 13
Date